To: Director and Laboratory Staff

From: Survey and Appraisal Section, Cotton Processing Division

Subject: SURVEY NOTES

LINT COTTON

1948 CROP LARGEST SINCE 1937; PRICE DECLINES TO PARITY; 3 TO 5 MILLION BALES GO INTO LOAN

This year's 15,219,000 bale crop (Sept. 7th USDA estimate) is the largest crop since 1937 and compares with an 11,851,000 bale crop last year. Acreage climbed 10 percent over 1947 and estimated yield per acre is 313.2 pounds, 23 percent more than last year's 267 pounds. With domestic consumption declining and the outlook for exports not too favorable, this large crop means a large surplus, and as a result the price of cotton has been declining until it now is down to about the loan level of 30,74 cents (table 1).

Commodity Credit Corporation officials expect that between 3 million and 5 million bales of the new crop will be put in the loan, tying up between \$450 million and \$750 million. A number of large producers have said they will not market their crop as long as the price is within a fraction of the new support price. (E. D. White, Assistant to Secretary of Agriculture, predicts 1947-48 exports will total 4 million bales, half under E.C.A.).

Daily News Record, Aug. 19, 1948, p. 1.

Table 1.- Supply, distribution, and price of cotton, United States, 1935-48

		U.S. :		:Carryover:	Price M	15/16"
Crop year	:Production:	consump-:	Exports	: end of :	:10-Market:	Loan
	:	tion:		: year :	average:	rate
	: 1,000 :	1,000:	1,000	: 1,000	: Cents :	Cents
	: bales :	bales :	bales	: bales :	:	
1935-39, average	: 13,149 :	6,938:	5,303	: 9,008 :	10.66 :	1/
1940	: 12,566:	9,722:	1,112	: 12,166 :	: 11.00 :	9.15
1941	: 10,744:	11,170:	1,125	: 10,640 :	18.31 :	14.22
1942	: 12,817:	11,100:	1,480	: 10,657 :	: 20.14 :	17.22
1943,	: 11,427 :	9,943:	1,138	: 10,744 :	20.65 :	19.26
1944		9,568:	2,006	: 11,164 :	21.86 :	21.08
1945		9,163:	3,531	: 7,521 :	25.96 :	21.09
1946		10,036:	3,544	: 2,530 :		24.38
1947 2/		9,345:	2,044	: 3,082		27.94
948		:	-	: :	30.974/:	30.74
	: :	:				

^{1/} Data not available.

2/ Preliminary.

JULY DAILY COTTON CONSUMPTION RATE LOWEST SINCE 1940

Consumption of cotton during the crop year ending August 1st was 9,345,000 bales, 7 percent less than last year and the least for any 12 months since

^{3/} August 1st forecast of 1948 production by Crop Reporting Board, P.M.A. 4/ September 2nd price.

Compiled from Agricultural Statistics, Cotton Production and Distribution, Cotton Situation, etc.

1939-40. Cotton exports were at a peacetime low for 76 years, totaling only 2 million bales. Average daily rate of cotton consumption in July was lowest since August 1940.

Table 2.- Cotton consumption and stocks, and spindle hours in cotton mills

:	July 1948				:	July 1947
Consumption, bales	2,808	3,415	:	4,239	:	2,521
Spindle activity, percent of : 80-hour capacity 1/	101.3	130.9	:	134.0	:	107.0

^{1/} Includes activity on fibers other than cotton, totaling 0.6 to 0.7 billion
 spindle hours for each month shown.
From Census Reports.

COTTON DECLINES TO PRICE PARITY WITH RAYON

Because of a 1 cent increase in price of viscose rayon staple, and the decline in cotton prices, Middling 15/16-inch cotton is selling at as low a price as rayon for the first time since 1945. In the meantime, cotton fabric prices continue to decline. According to the Wall Street Journal (Aug. 16, 1948, page 1), the price of 80 square print cloth has declined from 38 cents in January to about 25 cents at present. Bibb, Dan River, and other mills have curtailed operations, but Donald Comer sees no sustained curtailment. Mills are now meeting an 8% wage increase.

Table 3.- Prices of raw cotton, rayon staple and cotton fabrics, and cotton mill margins in cents.

	100				
temperatu temperatu temperaturu temperatur	Sept.2,:	July :	June	July	: Average
	1948 :	1948 :	1948	: 1947	1945
Cotton, Middling 15/16" :					
delivered at mills, lb:	32.80 :	35.61 :	38.53	: 40.06	23.76
Rayon, viscose staple,	:				
equivalent price 1/, lb:	32.93 :	32.04:	32.04	28.48	22.25
Cotton fabrics, average :				1 1000 100	
17 constructions 2/	- :	75.48 :	77.33	86.71	43.21
Mill margins 3/	:			The same	
Average, 17 cotton fabrics:	4	42.02 :	40.84	49.49	20.86
Average, 6 print cloths		51.25 :	50.10 :	77.70	22.61
Average, 3 sheetings	- :	29.58:	30.05	36,56	16.77
Average, 4 drills	- :	35.66 :	35.16	27.01 :	17.68
Average, 2 ducks		33.63 :	30.52	27.82	19.85
Con the partitions		:			

^{1/} Cost to mill of same amount of usable fiber as supplied by one pound of cotton (rayon price x.89).

COTTON CROP NOW MORE VALUABLE IN CALIFORNIA THAN CITRUS

California is now making more money from cotton than from oranges, lemons, and grapefruit combined. Because of drastically lower prices for grapes,

^{2/} Price of approximate quantity of cloth obtainable from a pound of cotton with adjustments for saleable wastes (Cotton Branch, PMA).

^{3/} Difference between cloth prices and prices (10-market average) of cotton assumed to be used in each kind of cloth (Cotton Branch, PMA).

vineyards are being plowed up and planted to cotton. "Some well informed cotton men think California will eventually be the second cotton state in importance," with a 950,000 bale crop expected this year.

Editorial, Cotton Trade Journal, Aug. 27, 1948, p. 2.

PRODUCTION OF AMERICAN-EGYPTIAN COTTON DOUBLES OVER LAST YEAR

Production of American Egyptian cotton is expected to total 2,600 bales as compared with 1,200 last year, and an average of 30,600 bales per year during 1937-46.

Cotton Production, BAE

LONG STAPLES MAY GO ON CRITICAL LIST

Active consideration is being given by the Munitions Board to the possibility of adding long staple cotton to the board's list of critical commodities. "Agriculture Department officials point out that current acreage of staples of linch and longer is only about 3,000, with current production of 2,500 bales."

Daily News Record, August 30, 1948, p. 1.

EGYPTIAN COTTON VARIETIES DISCUSSED

Several famous varieties have been evolved and developed by the Cotton Research Board. Amongst the best known is Giza 7, which flourished from 1934 to 1942. It has a staple of about 1-3/4 inches. Production per acre is about 425 lbs., and, in the year 1942, averaged 525 lbs. Probably the most famous of the Cotton Research Board varieties is Karnak, which from 1944 to 1946 was cultivated in Lower Egypt, almost to the exclusion of other growths. The crop in 1946 totaled about 440,000 bales. Towards the end of 1947, stocks of this variety in Egypt were large, and, consequently, its cultivation has been restricted by law, but it will, no doubt, be grown again on a large scale when the surplus stocks have been disposed of. It is a fine long-stapled cotton of about 1-9/16 inches. It gives an extremely high yield of some 450 lbs. per acre and is very popular with cultivators and spinners alike.

Another high-yielding growth is Menougi, with a staple nearly as long, though not so fine as Karnak. It yields about 650 lbs. per acre. Probably the finest variety ever produced in Egypt is a new growth called Amoun, which combines a staple length of about 1-9/16 inches with an average yield of some 450 lbs. It is only just coming into production on a large scale. Ashmouni, which has been grown in Upper Egypt since the early 'nineties, has a staple of 1-1/4 inches. It is a generous-yielding variety and in 1944 it produced the remarkable average yield of 700 lbs. per acre.

Article entitled "Cotton in Egypt," Fibres, July 1948, p. 250.

COTTON TEXTILE INDUSTRY

FIVE TEXTILE PLANTS PLANNED BY TEXTRON OF PUERTO RICO

Textron of Puerto Rico will construct five textile and apparel plants in Puerto Rico at an estimated cost of \$2,500,000. All five plants will be exempt from taxes in line with the Puerto Rican policy introduced in 1947. Under this plan, which is pointed to the textile industry, American companies

will be exempt until 1959 when a graduated scale of taxation goes into effect. Full taxation will not become effective until 1962, according to the publicity representatives. The plants, occupying 180,000 square feet of manufacturing space, will weave rayon and nylon fabrics and also do tricot knitting of those fibers. Bleaching, dyeing and sewing processes will produce 20 million yards of cloth per year. The five new plants will give Textron of Puerto Rico an annual sales volume of about 12 million dollars, it is said.

Daily News Record, Aug. 25, 1948, p. 2.

NEW PUERTO RICO KNITTING MILL PLANNED

Borinquen Textile Co. is erecting \$1.5 million, 12,000 spindle kmitting plant in San Juan, Puerto Rico, to employ 500, workers and to turn out T-shirts and infants wear. Most of the output will be marketed in the U.S. Troy Whitehead of Charlotte, N.C., is president. The company has been given complete tax exemption for 12 years.

Daily News Record, Aug. 23, 1948, p. 20.

CRANSTON BUILDS SOUTHERN BLEACHERY

Cranston Print Works is starting construction immediately on a new \$3.5 million finishing plant at Fletcher, N. C. The plant, devoted entirely to cotton goods will employ 400 persons. Main plant of the company is at Cranston, R.I., with a branch plant at Webster, Mass.

Southern Textile News, August 21, 1948, p. 1.

SPRINGS BLEACHERY BEGINS OPERATIONS

The Springs Cotton Mills new bleachery and finishing plant, representing an investment of \$15 million is ready to begin operations. In it's bleachery, it will use continuous processes throughout, moving cloth through in a single day against the week required in older bleacheries, at a rate of 3 million yards a week. It will process about half of Spring's output, which now is treated at approximately 40 different bleacheries.

Journal of Commerce, August 3, 1948, p. 15.

COTTON PRODUCTS

ENDS DOWN GREATLY REDUCED BY SCIENTIFIC SELECTION OF MILL MIXES

J. F. Hembree, Texas University is conducting an experiment for the Texas Cotton Research Committee to determine "spinning results on cotton segregated by the use of instrument measurements and statistical techniques." Mill mixes of cotton were selected at five Texas cotton mills by (1) customary mill methods, and (2) with further segregation on the basis of scientific tests for length, length uniformity, tensile strength, fineness, and maturity of cotton. It was found (1) that ends down per 1000 spindle hours for the instrument - measured cotton average about 70 percent of that for cotton selected in the customary manner; (2) yarn made was about 10 percent stronger; (3) and the yarn was mostly, but not always, more uniform. It is stated in conclusion that "The producers of synthetic fibers can control such items as fiber fineness, length, and strength. The disadvantage of cotton in this respect can be offset or reduced through the use of instruments which will measure fiber characteristics. . . . Segregation of cotton into uniform lots that will insure maximum processing behavior in the mill

is the job of the merchant."

Spinning Results on Cotton Segregated by the Use of Instrument Measurements and Statistical Techniques, J. F. Hembree, University of Texas

LIGHT WEIGHT FIBER CONCRETE DEVELOPED AT UNIVERSITY OF MICHIGAN

A light-weight fiber concrete, several times more resistant to damage by fire than normal sand-cement concrete, was developed at the University of Michigan during the war, according to a research report on light-weight aggregate materials now on sale by the Office of Technical Services, Department of Commerce. Fiber concretes were among many types of light-weight cement-bonded aggregate compositions investigated. The object was to investigate "hard-setting, light-weight plastic compositions having lattice of fibrous materials, a binding matrix of portland cement, and a chemical admix; and suited to be formed by machine into a sheet, or into an insulative panel or floor covering in building construction, or to be poured, sprayed, or otherwise applied in factory or field fabrication." The composition sought was to be resistant to fire, rot and termites, for exterior exposure.

COTTON ELIMINATED FROM PALM BEACH BOYS WEAR

Last year's Palm Beach cloth for boys wear, made of cotton warp with mohair and rayon filling, will be replaced this year by an "improved" blend of mohair and rayon, which, Goodall Company spokesmen say, is finer-faced and has a finer count.

Daily News Record, Aug. 24, 1948, p. 12.

COTTON INSULATION: INCENTIVE PAYMENTS CONTINUE

Incentive payments to encourage the use of low-grade, short staple cotton in the manufacture of insulation will be continued under a program announced by the U. S. Department of Agriculture. Under the program for 1948-49, manufacturers will receive 4-1/4 cents per pound, gross weight, on cotton used in compliance with program provisions through June 30, 1949. This is 1-1/2 cents per pound lower than the rate in effect in 1947-49. and only about one-half the rate per pound in effect for several years during the war. The cotton insulation program was begun in the spring of 1940.

Cotton Trade Journal, Aug. 13, 1948, p. 8.

TIRE FABRIC PRODUCTION DECLINES SLIGHTLY IN SECOND QUARTER

Production of tire fabric declined from 149 million pounds in the first quarter to 140 million pounds in the second quarter, but was still at a rate only slightly below last year's record output. Cotton's percentage declined from 59% in the first quarter to 57% in the second. (Table 4).

HIGH 1949 DEMAND FOR TIRES PREDICTED

During the past 3 years, approximately 260 million tires for motor vehicles have been produced in the United States, 45% more than the 180 million produced during the three years just prior to the war. "Even with an expected seasonal decline in the fourth quarter, the outlook for total tire production in 1948 is for some 86 million tires against last year's all-time record of 100 million and between 60 million and 63 million in the best of the prewar years." Current estimates for 1949 place the demand at roughly 81 million

tires, barring any serious readjustments of the current inflationary spiral. The high levels of demand for tires is due to increased number of cars, trucks and tractors in operation, to a continued unsatisfied demand for all types of motor vehicles, to increased mileages driven yearly, and to sustained high levels of purchasing power and business activity.

P. W. Litchfield, Goodyear, as reported in Wall Street Journal, Aug. 25, 1948, p. 3.

Table 4.- Production of tire fabric in United States, 1946-48

a declaration of the state of		Quantities	5			Percentage	S
Year	Cotton	Rayon and	Total	::	Cotton		: Total
Gertal of the Con-	COUCON	nylon	ioual	::	Cocton	: and : nylon	: Total
	Million :	Million	: Million	::	Percent	: Percent	: Percent
Change and the land	pounds :	pounds	pounds	::	Married World	: 1 00 00 1	:
1946:	311 :	212	523	::	59	: 41	: 100
1947:	345 :	230	575	::	60	: 40	: 100
1947, 1st. qtr.:	93 :	57	: 150	::	62	: 38	: 100
4th. qtr.:	84 :	62	146	::	58	: 42	: 100
1948, 1st. gtr.:	88 :	61	149	::	59	: 41	: 100
2nd. qtr.:	80 :	60	140	::	57	: 43	: 100

Compiled from Facts For Industry Series, Bureau of the Census.

RAYON TIRE FABRIC UPPED IN PRICE

American Viscose Corp. raised all of its tire yarn and fabric quotations on August 9th by 2 cents per pound except for 1650/980 yarn, which was increased 3 cents per pound, and 2200/980 yarn, which was increased 4 cents per pound. (Quotations are given in "Competitive Materials" Section.) This brings the difference in price between 1100 and 2200 denier yarns down to 2 cents per pound, as compared with 4 cents since December 1947, and 2 cents before that. American Viscose Corp. now gets 14 cents per pound for twisting and weaving 1100/490 denier fabric, 13 cents for the 1650/980 fabric, and 12 cents for the 2200/980 fabric.

Table 5.- Prices of cotton and rayon tire fatrics, July 1 and Aug. 1, 1948

Fab ric	Cord	: Fabric : weight :	Price per pound		Prince now normal Drine			er sq. yd.
		:per sq.yd.:	Aug.1	: Sept. 1:	: Aug. I	: Sept. 1		
		: Pounds :	Cents	: Cents :				
Passenger car tires :	104 205	: 4		:		:		
Cotton fabric:	12/4/2	: .86 :	76	: 76 :	65	: 65		
Rayon fabric:	1650/2	: .67 :	64	: 66.5 :	43	: 45		
Truck tires	OTT WEAT	THE END USE		CALCAD DO	21 202 01	20% WOTE		
Cotton fabric	12/4/2	: .86 :	1/	: 1/ :	1/	: 1/		
Rayon fabric:	1100/2	: .54 :	66	: 69 :	36	-		
Rayon fabric			62	: 65 :	50	53		

1/ No quotation received.

Based on reports from independent rubber companies for fabric constructions most heavily used.

PRICE OF BURLAP BAGS INCREASES

Prices of 100-1b. flour bags remained unchanged from July to August. They now sell for \$236.25 per thousand, compared with a peak of \$321.90 in March 1947. Prices of burlap bags rose during the month.

Table 6.- Prices of new 100-lb, flour bags (Dollars per thousand bags)

New bags, St.	Louis 1/:	August 13, 1948	: July 1, : 1948	:August 1, : 1947	:August 1, : 1946	:August 1, : 1945
Cotton Burlap Paper	*******	228.85	: 205.30	: 280,50	: 155,80	: 149.85
1/ Cotton 37" 4-1/2 x 36-						

UP TO 10 POUNDS OF TRASH REMOVED FROM MECHANICALLY PICKED COTTON BY NEW PROCESS

A new process for cleaning trash has been developed at Stoneville, Miss., which brushes out more than 10 pounds of trash from a bale of cotton. "The system of rotating saws that cleans the seeded lint will raise mechanically-picked cotton a full grade," increasing its value six dollars. Other qualities added are higher yarn strength and whiter color. Francis L. Gerdes said it was "probably one of the greatest developments in the past 50 years."

Cotton Trade Journal, September 3, 1948, p. 6.

COTTON GOODS OUTPUT CONTINUES HIGH DURING SECOND QUARTER

Production of cotton broad woven goods totaled 2,539 million linear yards during the second quarter of 1948, 2% off from the first period, but 3% greater than in 1947. There were no outstanding changes in types of goods produced as compared with the final quarter.

Based on Facts For Industry, Bureau of the Census.

COMPETITIVE MATERIALS

RAYON PRICES INCREASED

On August 9th, American Viscose Corp. increased the price of viscose staple fiber 1 cent per pound, the price of continuous viscose textile yarns 3 cents per pound, viscose tire yarns, 2 to 4 cents per pound, and viscose tire fabrics by 2 cents per pound. Acetate yarns and staple fiber remained unchanged in price. (Acetate staple was not raised in price last December, either). Because of these increases, plus declines of 4 to 10 cents per pound in cotton fiber and yarn prices, cotton's price situation versus rayon is improved compared with previous months. The rayon increases followed a wage increase at Avisco plants of 16 cents an hour, retroactive to June 27, 1948.

Table 7.- Rayon prices per pound as of August 1948, with increases over old quotations and comparable cotton prices

Design consistent respective for the second	August	: Increase	:Comparable
Type and size (for yarns, total :	1948	: over	: cotton
denier and number of filaments) :	price	:Dec. 1947	: price
		: price	:
particularly industrial industria	Cents	: Cents	: Cents
Viscose staple :			
Regular, bright	37	: +1	:)
Regular, dull	38	+1	:
Short staple blend, bright	40	: +1	:)
Short staple blend, dull	41	. +1	:) 37 1/
Extra strength—1.5 denier and coarser.:	39	+1	:
Extra strength—1.0 and 1.25 denier:	40	+1	· · · · · · · · · · · · · · · · · · ·
	38	+1	
Grimped, bright	39	: +1	:
Crimped, dull	00	THE PARTY OF	
Viscose tow : Tow (grouped continuous filament) :			PROBLET IN
bright—180,000 total denier and :			· M T BOOK
	40	+2	THE PARTY OF
heavier	40	. 72	in constitute in
Viscose tire yarn and fabric :	57	: +2	: 55 2/
1100/490 cones, tubes, beams	56	: +3	. 33 2
1650/980 cones, tubes, beams	55	: +4	The state of the s
2200/980 cones, tubes, beams:		: +2	130 1 1892
1100/490 fabric	71 69	: +2	Contract of the Contract of th
1650/980 fabric:			
2200/980 fabric:	67	: +2	The last the second
Viscose yarn	7.50	:	
40/14 cones:	178	: +3	i de la
100/40 bright cones:	97	: +3	: 00 7/
150/40 bright cones:	77	: +3	: 80 3/
150/40 medium strength:	80	+3	· cr //
300/44 bright cones:	62	: +3	: 65 4/
Acetate yarn :		:	
45/13 cones, cheeses:	130	: 0	The second
100/26 cones, cheeses:	91	: 0	: 00 7/
150/40 cones, cheeses:	74	: 0	: 80 3/
300/80 cones, cheeses:	70	: 0	65 4/
Acetate staple fiber :	- 4 1,125		: 203/
Up to 8 denier per filament:	48	: 0	:) 37 1/
Over 8 denier per filament:	50	: 0.	:)
	the same against the same and the same	The second second second second second	The state of the s

^{1/} Mill price of M 15/16" cotton as of September 2, 1948, divided by .89 to allow for waste and tare.

RAYON: DOWNWARD TREND IN PRICE PREDICTED

Joseph B. Quig, DuPont, asserted that the downward trend in prices of synthetics, evident since 1920, would continue. Annual consumption of man-made fibers would be more than 1.2 billion pounds by 1949 or 1950.

Daily News Record, Aug. 19, 1948.

^{2/ 1100} denier is equivalent to 4.8 cotton count. This is price of 4s carded cotton yarn. However, this is not a cotton yarn size used for tires.

^{3/ 30} single carded yarn. 4/ 18s single carded yarn.

^{5/} For top ply. For carcass, 68.5 cents; for breaker fabric, 70 cents. Compiled from price schedule of American Viscose Corporation.

RAYON PROFITS NEARLY TRIPLE PREWAR

According to the Federal Trade Commission, seven major rayon corporations had a net income after taxes of \$15,266,000 in 1940 with an 8.6% rate of return after taxes; in 1947 the net income was \$44,330,000 and rate of return after taxes was 18.7 percent.

Daily News Record, Aug. 16, 1948, p. 1.

CORDURA RAYON USED FOR LINGERIE, PILLOWSLIPS

Ponemah Mills have announced the first lingerie fabric made entirely from DuPont "Cordura" high tenacity rayon yarn. The new fabric, called "Tenura", is also being used for pillowcases, etc., is lightweight and closely woven, and said to resist shrinkage.

Daily News Record, June 11, 1948.

RAYON: ITALIAN RAYON CONCERN SURVEYS U.S. PLANT SITES

Snia Viscosa is "still" planning erection of a rayon plant in the United States and is considering nine sites, although Franco Marinotti, president, said there was no early prospect of building a plant. Feasibility of plants in other parts of the world is also being considered.

Daily News Record, Aug. 25, 1948, p. 2. (Snia Viscosa is the largest Italian rayon producer and is partially owned by Courtaulds, former parent company of American Viscosa Corp.)

RAYON: CELANESE USES TERM "ACETATE RAYON" INSTEAD OF "ESTRON"

Use of the term "acetate rayon" by Celanese Corp. in announcing prices for October has aroused considerable interest in the trade. Celanese has been fighting the Federal Trade Commission over a period of years in the courts because of its refusal to use this term in the past. It is expected that the company "might" use it more and more in the future. "It is understood in the trade that Celanese does not regard favorably the term 'estron'." (This follows Tennessee-Eastman's advertising campaign on use of "estron." About half of all U. S. acetate rayon is produced by Celanese; the remainder by Tennessee-Eastman, Dupont, and American Viscose Corp.).

Daily News Record, Aug. 26, 1948, p. 1.

DUPONT'S FIBER A TRADE-MARKED "ORLON"

DuPont's Fiber A (polymethacrylonitrile) has been given the trade-mark name of Orlon. Production is limited at present to about 1,000 pounds a month in a pilot plant at DuPont's acetate plant at Waynesboro, Va. This fiber has high resistance to sunlight, a tenacity of 4 to 5 grams per denier, and low moisture absorption. Trouble has been encountered in dyeing it. Trade reports are that it would probably not be well suited for clothing uses, but would be valuable for outdoor industrial applications

Daily News Record, Aug. 19, 1948, p. 1

FIBERGLAS AWNINGS DEVELOPED IN NEW ORLEANS

An advertisement in Business Week shows a Fiberglas awning over the Terrace Restaurant at Pontchartrain Beach. According to the advertisement, "It won't burn, it withstands 100,700 double rub wear tests, and 50,000 flexings through a 180° bend without a sign of wear. The Holton Corp. (New Orleans, La.) developed it from Duplan Fiberglas fabric and vinyl resin. The colors

are brilliant, and soap and water cleaning keeps them that way. This clean surface is mildew resistant. The fabric is extra strong." Upholstery fabrics are made from the same cloth. It is claimed that a greenhouse can be built for one-fourth usual investment using this fabric.

Business Week, Aug. 7,1948, p.99.

basiness week, hag. 1,1040, p.

NYLON REPLACING RAYON FOR WOMEN'S KNITTED UNDERWEAR

Within the last year several American mills have announced their intention of making all their underwear production in nylon tricot. Rayon yarn producers say they are not worried because 55 denier rayon warp knit fabrics range from 33 cents to 40 cents per yard, while nylon tricot sells for \$1.10. As greater supplies become available late this year, consumer reaction will be watched.

Hosiery and Underwear Review, July 1948.

NYLON TO BE USED SOON IN SHEETS, SHIRTING, WORK WEAR

Nylon staple will find use soon in sheeting, shirting and work clothes, according to Dr. L. L. Larson, manager of the sales development nylon division of E. I. du Pont de Nemours & Co., Inc. This fall, a knitting nylon staple yarn will be brought out by Lee & Sons under the trade names Minerva and Columbia, Dr. Larson said. The new yarn will hold its shape because it will be thermoset. Most of the knitting nylon yarns on the market now are waste nylon, Dr. Larson added. Nylon top fiber can be crimped like wool, then cut into short lengths, combed, drawn and spun in one operation. The resulting fiber costs a little less than wool, he stated. Crimp set nylon staple gives left and can be washed, getting softer with each washing, Dr. Larson said. Uses of nylon he listed as work gloves, cover cloths for ironing boards, and rugs. In the latter case, he said, a recent abrasion test by United States Testing Co. showed less wear on a nylon rug after 260,000 revolutions than on a wool rug after 60,000 revolutions. Blankets have been made, he stated, containing one-third nylon and two-thirds wool; lightweight suits, 20 per cent nylon and 80 per cent wool. He said the warmest overcoat possible, though not practical, was two very thin nylon fabrics with Fiberglas between. The advantages of nylon staple in hosiery he listed as warmth, no shrinkage, and durability, stating that in one test a sock was worn for 178 days and no hole was produced in it.

Daily News Record, Aug. 24, 1948, p. 1.

JUTE: INDIA SEES 20 PERCENT OF NORTH AMERICAN BURLAP SALES LOST

Authoritative opinion in the Indian jute industry estimates that 20 percent of the North American market for jute manufactures has been lost to cotton and paper substitutes since the end of the war. Their success is clearly dependent largely upon the price for burlap, although price is not the sole factor.

Journal of Commerce, August 25, 1948, p. 13.

RAMIE-NEW AUSTRALIAN PROCESS REPORTED SUCCESSFUL

After two years of extensive investigation by scientists from the New South Wales Department of Agriculture, a "simple and economical method of producing clean, degummed ramie fiber" has been pronounced fully successful. They confirmed that the method enabled a 100% recovery of fibre, did not damage or weaken it in any way, and did not result in loss of lustre or inherent natural qualities. It completely removed all traces of gum and at a cost

considered infinitesimal when measured against the market price of the fibre. The new process is said to achieve degumning by subjecting the stems of green ramie to steam pressure followed, when dry, by a crushing operation to remove the woody substance. Detailed reports are awaited on commercial spinning trials in British factories.

Textile Manufacturer, July 1948.

FLORIDA RAMIE SHIPPED OVERSERS

A 104-ton commercial shipment of Florida-grown ramie, said to be the first to go overseas, was loaded in Tampa recently for Dottikon, Switzerland, where it will be woven into cloth.

Daily News Record, August 4, 1948, p.19.

RAMIE PACKING NOW PRODUCED BY U.S. RUBBER

Ramie packing for reciprocal pumps is now being produced by United States Rubber Co. It is recommended for such use as cold water and brine pumps, etc., where service requirements are too severe for flax or jute.

Southern Textile News, Aug. 21, 1948. p. 3.

RAMIE: REPORT GIVEN ON GEORGIA TECH RESEARCH

Harold T. Coss, Supervisor of thermal insulation and textile research, Johns-Manville Research Conter, and Dr. James L. Taylor, Professor of textile engineering, Georgia Tech, are authors of a research paper "Ramie Today." While it was considered doubtful that ramie would replace cotton, however, "it is possible to make fabrics from staple ramie that would equal or even outperform line flax febrics (linen) in general wear resistance, and would compare favorably with linen in appearance and hand. Ramie is especially suitable for use in high grade specialty fabrics, where a premium in appearance or serviceability is attractive and desirable." The ramie fibers studied came from the Phillipines, Sumatra, Brazil, West Africa, Cuba, and Florida. Considerable variation in quality and preparation was noted in the Florida fiber, "only a small amount being of the 'wash-decorticated' type" which is most suitable for use. The authors found that several processes could be used to degum ramie fibers, but that close control was necessary. Proper opening of the fibers after degumming proved difficult, and special adjustments must be made in the cotton mill equipment before the fibers can be spun.

Ramie yarns and fabrics may be dyed and finished in more or less conventional manners. The fabrics developed were made into summer wearing apparel, table fabrics, draperies, upholstery materials, and kitchen towels. Among industrial products made were packing, heavy canvas, braided wire covering, narrow tapes, and marine cordage. Some of the heavier weight fabrics woven from coarse style yarns take on an attractive worsted appearance. The authors found that fabrics and yarns made from stapled ramie fibers do not retain the high strength of the unstapled fibers, although they are still generally superior to cotton. Brittleness was not found to be an inherent characteristic and can largely be controlled by degumming and finishing treatments. Ramie yarns and fabrics were found to be superior to both cotton and linen in resistance to flexing and to residual shrinkage during repeated launderings. in tearing strength and bursting strength, and in tensile strength while wet. They are superior to linen in resistance to mildew, and the fabrics demonstrated excellent resistance to deterioration due to folding and creasing. The ramie fabric was slightly "cooler" than the cotton in a coolness test on comparable fabrics. Daily News Record, Aug. 24, 1948.

SILK: WORLD OUTPUT ONLY 20 PERCENT OF PREWAR

High production costs and the rise of rayon and nylon stymic output in key areas—Jopan, China, Italy. In Japan, production creeps along at about 120,000 bales (132 pounds each) a year; before the war the Japs turned out 750,000 bales yearly. China is at a yearly output rate of only 12,000 bales; her prewar average was about 60,000 bales. Italy, which produced over 50,000 bales in some prewar years, turned out only 16,000 bales last year. With rayon-nylon production soaring, silk prices have tumbled since the war. Worth as high as \$10 a pound in the U.S. shortly after the shooting ended, silk now brings less than \$3 a pound.

Wall Street Journal, Aug. 17, 1948, p. 1.

SISAL USED IN PLASTIC CHAIRS.

General American Transportation Co., manufacturer of railway cars, buses, etc., is now manufacturing a plastic chair to sell for less than \$15. The chair, consisting of a one piece plastic seat and back, 4 bolts and metal legs, is molded from "Co-ro-lite" Columbian Rope Company's sisal matting, impregnated with phenol resins. It is designed for institutions. The company will manufacture tables and bases for upholstered furniture later.

Wall Street Journal, Aug. 19, 1948, p. 3.

TEXTILE RESEARCH AND EDUCATION

N. C. TEXTILE FUND REACHES \$1,000,000

According to Dean Malcolm E. Campbell of the School of Textiles, North Carolina State College, the textile fund has reached \$1,000,000 recently. These funds are used in making salary supplements for research authorities and faculty members in the School of Textiles at the College. Dean Campbell also stated that work will begin in the early part of August on a \$700,000 building project at the College's School of Textiles. This building project will increase the school's space for facilities and classrooms by 80 percent.

Journal of Commerce, July 29, 1948, p. 11.

NEW TEXTILE BUILDING AT SOUTHERN RESEARCH INSTITUTE

At a special meeting, held in Birmingham, Alabama, August 26, the trustees of the Southern Research Institute authorized the construction of a \$200,000 laboratory for the division of plastics and textiles. In his semi-annual report, acting director William Murray, Jr., said that the Research Institute's expenditures this year will top the \$480,000 mark.

Journal of Commerce, August 27, 1948, p. 13.

GEORGIA TECH WORKS ON STARCH, RAMIE, NYLON STAPLE, ETC.

Textile research projects at Georgia Tech during 1947-48 include (1) a study of three generally used starch modifications and their effect on relative humidity necessary for weaving cotton fabrics for 1. E. Staley Manufacturing Co. (Differences in effectiveness not sufficient for further tests); (2) Ramie processing study for Johns-Manville Corp. (Guidance in building Johns-Manville pilot plant based on Ga.-Tech experience. Operation of pilot plant said to be quite satisfactory); (3) Nylon staple processing on cotton equipment for DuPont (Several modifications of equipment have been made; (4) High speed movies of textile

processes; (5) Development of a mechanism to discrient fabrics in making of buffing wheels from cloth layers for A. R. Gleney, Inc.

Chem. & Eng. News. Aug. 23, 1948. p. 2498

PATENT OFFICE PROCEDURE UNDER STUDY

Efficiency studies are now being made at the Patent Office by two private consulting firms under a \$50,000 grant from Congress, with object of cutting down waiting period to six to nine months and eventually to a few days. A revised classification set—up is being considered.

Wall Street Journal, Aug. 18, 1948, p. 1.

TEXAS TECH SEEKS FASTER WAY TO FIND SPINNING VALUE

A cotton research project, expected to last six months, to develop a system for reducing the time in determining the spinning value of cotton to one or two days is underway at Texas Technological College, Lubbock, Texas. It is a cooperative effort on the part of the cotton textile research division of the Cotton Research Committee of Texas and the cotton fiber and spinning research division of the Chicopee Manufacturing Corporation. Mark Wood is in charge of cotton research work at the college.

Cotton Trade Journal, Aug. 27, 1948, p. 8.

COTTONSEED AND PEANUTS

BUMPER CROPS ASSURE BIG INCREASE IN VEGETABLE OIL PRODUCTION

The weather this summer has been exceptionally favorable for high yields per acre in nearly all areas where oil crops are grown. Production of soybeans, estimated at a record 205 million bushels, is 13 percent larger than last year. With cotton lint production estimated to be up 28 percent from last year and the largest since 1937, output of pottonseed also will be large. The 1948 flaxseed crop is estimated to be 41.5 million bushels, 12 percent larger than last year and the second largest of record. Production of peanuts picked and threshed may be 2,341 million pounds, 7 percent larger than in 1917 and the largest of record. Production of animal fats in 1948-49 may decline slightly, mainly because of the 3 percent decrease in the 1948 spring pig crop. Some increase in imports of coconut and palm oils is probable as a result of increasing output in the Far East. The general level of prices of fats and oils in the year beginning October 1948 is likely to be moderately lower than a year earlier as a result of an increased supply. Continued strong domestic and export demands, however, probably will keep the twelve-month average of prices of most fats and oils well above the wartime ceiling. (Table 8). Fats and Oils Situation, BAE, Sept. 3,1948.

1948 PEANUT CROP EXPECTED TO BE 2.3 BILLION POUNDS

This year's peanut crop will total about 2.3 billion pounds, as compared to 2.2 billion pounds in 1947; 2.0 billion pounds average during 1941-45; and 1.3 billion pounds average during 1936-40. As indicated in table 9 the acreage picked and threshed in recent years nearly doubled, but the production per acre is less than during the 1936-40 period. The price of peanuts today is 10.4¢ or approximately 3 times what it was during 1936-40.

Table 8. - Prices of vegetable oils and meals

	August	*	July	* *	June	:	August	:	September
:	1948		1.948	•	1948	:	1947	:	1946
Special commodernment of the contraction as a distance as				Cent	s per p	oun	d		- Allendar Walter - Walter - Allendary
OILS 1/	August 3	50:		;	er tipe direktijkere rega graaf	*	~	:	
Cottonseed oil:	23.0	;	27.5	:	35.4	:	18.5	:	12,5
Peanut oil	25.0	:	27.8	:	33.8	:	19.2	:	13.0
Soybean oil:	23.0	:	22.1	:	27.3	:	15.9	*	. 11.9
Corn oil		:	26.6	:	34.1	:	20.0	:	12.8
Coconut oil 2/			23.0	:	28,8	:	14.5	*	11.1
Linseed oil 3/:		:	29.1	:	29.4	:	29.1	:	17.8
Tung oil 4/:	22.0	:	21,4	:	25.0	:	26.3	:	39.0
:				Doll	lars per	+.o	n		
MEALS 5/	August 3	28:		*		:	-	:	
Cottonseed meal 6/:	63.50		82,95	4.	86,60	:	83.25	:	62.75
Peanut meal 7/:		:	80,45		81.00	:	80,00		67.25
Soybean meal 8/:			96.90		94.25	:	91.90	:	
Coconut meal 9/:	78,00		92.75	:	93,10	:	72.90	:	59.70
Linseed meal 10/:	60.50	:	72.00	:	73,50		77.90		59.25
:		:		:		:			000
/ and table for h	m:17- c-			777-	- C:7	D	1 - 1 5	-	

Crude, tanks, f.c.b. mills except noted. From Oil Paint and Drug Reporter (daily quotations) and from Fats and Oils Situation, BAE (monthly quotations).

Drums, carlots, N. Y.

Table 9. - Acreage, yield, production, and price of peanuts

Year	: Picked and threshed	:	Yield per acre	Production	:	Price
	1,000 acres	:	Pounds	: Million pounds	:	Cents
1936-40, ave. 1941-45, ave.	: 1,767	:	76 3. 1	: 1,349.6	:	3.40 6.83
1946	: 3,142	•	649.0	: 2,038.4	:	9.48
1947		:	646.0 701.0	: 2,188.0 : 2,340.7	:	10.18

^{1/} Crop forecast, 1948, BAE.

PROTEIN FIBER: PRODUCTION BEGUN BY VIRGINIA CAROLINA CHEMICAL CORP.

According to the annual report of Virginia Carolina Chemical Corp., (year ending June 30), the fiber plant has begun limited production of protein fibers

Crude, tanks, Pacific Coast. Raw, drums, carlots, N. Y.

Bagged carlots, as given in Feedstuffs (daily quotations) and Feed Situation BAE (monthly quotations).

^{6/ 41} percent protein, Memphis. 7/ 45 percent protein, S. E. Mi 8/ 41 percent protein, Chicago. 45 percent protein, S. E. Mills.

^{9/. 19} percent protein, Los Angeles. 10/32 percent protein, Minneapolis, prior to May 1947; 34 percent protein after that date.

^{2/} July 15 price.

Compiled from releases of BAE.

for the textile and related industries. "Acceptance by the trade has been encouraging, but a high volume production and broad distribution are not anticipated within the current fiscal year. Meanwhile, research and development continue." The report discloses that \$1,500,000 was expended for the Taftville plant.

Daily News Record, Aug. 25, 1948, p. 20.

LOW PRICED FOOD DEVELOPED FROM SOYBEAN GRITS; ENRICHMENT OF VEGETABLE PROTEINS FOR HUMAN FOOD DISCUSSED.

MPF is a "cheap, nutritious, and tasty diet supplement" made mostly of soybean grits, with vitamins, iron and calcium added for food value and onion powder and other seasonings for flavor, developed by Dr. Henry Borsook of Cal. Tech. and made by the Meals for Millions Foundation of Los Angeles. It is used to make ground meat, to stretch soup, or is served by itself like cooked cereal; and sells in bulk to relief agencies for 24 cents a pound, or 3 cents a meal. It was intended for relief purposes, but following an article in the Ladies Home Journal, the company has had a deluge of requests from U. S. consumers who want it to replace meat... Two ounces of MPF (price-6 cents) have about the same nutritional value as a full meal of 3-1/2 ounces of meat, a potato, a serving of peas and a glass of milk..."

Wall Street Journal, Aug. 13, 1948 p. 1.

Dr. Anthony A. Albanese of the N. Y. University College of Medicine predicted that cheap, vegetable proteins, such as soybeans, can be made as nutritious as meat and eggs by enriching them with synthetic amino acids derived from ammonia and petroleum (At Fourteenth Annual Meeting of American Chemical Society, Washington).

Wall Street Journal, Sept, 3, 1948, p. 1.

SWEETPOTATOES

SWEETPOTATO PLANTINGS DECLINE

Sweetpotatoes are on their way to becoming a rarity on the American dinner table. Plantings of the sweet spuds, tumbling steadily since 1932, are now only about half what they were less than two decades ago. Southern farmers, principal growers, will harvest 11% fewer acres this year than last, 26% fewer than the 1937-46 average. And the crop is expected to be the smallest in 24 years. High production costs are blamed. Sweetpotatoes require much hand labor. Growers are turning potato patches to cotton and peanut fields, where the machine plays a bigger role.

Wall Street Journal, Aug. 17, 1948, p. 1.

LINTERS AND CELLULOSE

PURIFIED LINTERS NOW PRICED NEARLY AS LOW AS ACETATE GRADE WOOD PULP

The price of purified cotton linters fell from 11.50 cents per pound at the beginning of August to 9.75 cents per pound at the end of August, reflecting the impact of the new large cotton crop. It should be noted that purified linters now sell for only one-quarter of a cent more per pound than the aceta te and cupra grade of wood pulp, as compared with an average of 8.3 cents more in 1947. This undoubtedly is one of the smallest differences between prices of the two materials in many years.

Table 10.- Average annual prices of purified linters and dissolving wood pulp, 1946-47, and monthly quotations March - August 1948

(Cents per pound)

:		The second secon	Wood pulp2/	
and or your years.	Purified linters 1/	Standard viscose grade	: High-tenacity: : viscose : : grade :	Acetate & cupra grade
		Eraue	grade	Erade
1946	9.50	5.60	: 5.80 :	6.20
1947:	16.30	7.00	: 7.40 :	8.00
1948, March:	12.25 :	7.65	: 8,35 :	9.10
1948, April	12.25 :	7.85	: 8.35 :	9.10
1948, May:	12.60	7.85	: 8.35 :	9.10
1948, June:	12.60	7.85	: 8.35 :	9,10
948. July:	11.65	8.03	: 8.53 :	9.30
1948, August:	10.25	8.20	: 8.70 :	9 50

1/ Weighted averages, 1946-47. Compiled from letters from a producer. F.O.B. pulp plant.

2/ Average of average monthly prices, 1946-47. Compiled from Rayon Organon and from letters to us from producer. Wood pulp prices are F.O.B. domestic producing mill, full freight allowed, and 3% transportation tax allowed, December 1, 1947, on; freight equalized with that Atlantic or Gulf port carrying lowest backhaul rate to destination plus 3% of backhaul charges, prior to December 1st.

DISSOLVING PULP SUPPLY 9 PERCENT GREATER THAN IN 1947
Supplies of dissolving wood pulp were 9 percent greater during the first six months of 1948 than during the first six months of 1947.

Table 11.- Dissolving wood pulp: Production, exports, imports, and quantities made available for consumption, U.S., 1939-1948

Year	Domestic : production : 1/ :	Imports	Exports	:Available for :domestic con- :sumption 3/
1939 1945 1946 1947 1947, Jan June 1948, Jan June 1947, June 1948, June		88,052 143,802 202,192 248,606 112,272 122,063 17,687 23,417	48,232 13,033 8,491 10,389 5,299 7,814 938 2,567	### ##################################

1/ Sulphite, bleached, dissolving grades. From Facts for Industry, Pulp and Paper Manufactures, Bureau of the Census.

2/ Sulphite, bleached, rayon and special chemical grades. Data from foreign commerce statistics of the United States, Census Bureau.

3/ Production plus imports less exports.

4/ No data.

AMERICAN VISCOSE CORP INVOLVED IN ALASKAN PULP VENTURE

The Ketchikan Pulp and Paper Co., which is undertaking development of wood pulp in Alaska, is partially owned by American Viscose Corp. as well as by Puget Sound Pulp & Timber Co. The company has entered into a 50-year contract with the Forest Service following its successful bid for 8 billion board feet of

timber in Tongass National Forest. The company also has purchased a plant site near Ketchikan where it plans to build a plant capable of producing 300 tons daily of high alpha wood pulp. It is hoped that construction will begin in the summer of 1949. "American Viscose will continue to purchase pulp from present suppliers, it was learned authoritatively. But it was understood that the company felt that it could not expand without additional pulp supplies.

Daily News Record, Aug. 4, 1948, p. 1.

(American Viscose Corp. is the second rayon company to undertake production of its own wood pulp, following Celanese' current development of wood pulp in northwest Canada.)

OUTPUT OF FLAX CIGARETTE PAPER OFF

According to Harry H. Straus, president, Ecusta Paper Corp. has closed 2 of its 9 large paper machines because of falling off in export sales of its flax cigarette paper. They are trying to work out barter deals with foreign countries including one on tung oil with China.

Southern Pulp and Paper Mftr., Aug. 15, 1948, p.40.

WORLD FOOD SITUATION

WORLD FOOD PRODUCTION LAGS BEHIND POPULATION INCREASE.

Taking into account all known plans for an increase of food production between now and 1951, including the Marshall plan, the result will be that the world's food production in 1951, will be approximately the same as that in the years preceding the war. The world's population, however, is increasing at the rate of 20 to 25 million a year. The position in 1951, therefore, will be that there will be substantially lower per capita production than in the years before the war.

Lord Bruce, FAO, quoted in address by Norris E. Dodd, Director General, FAO, July 9, 1948 And the state of the States and the States and the state of the state